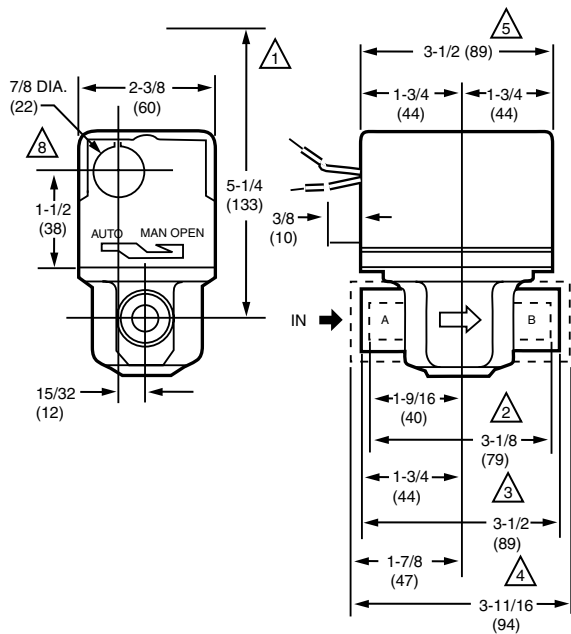


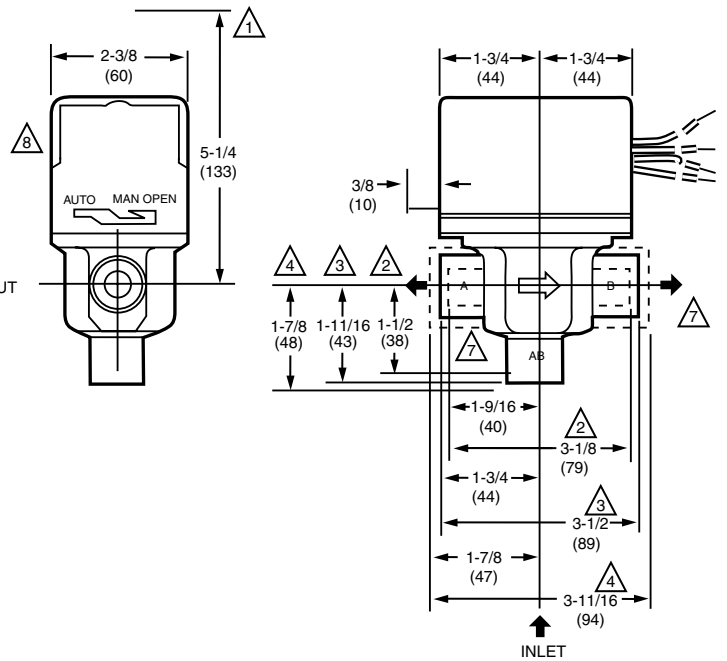
# Motorized Zone Valves

Dimensions in inches (millimeters)

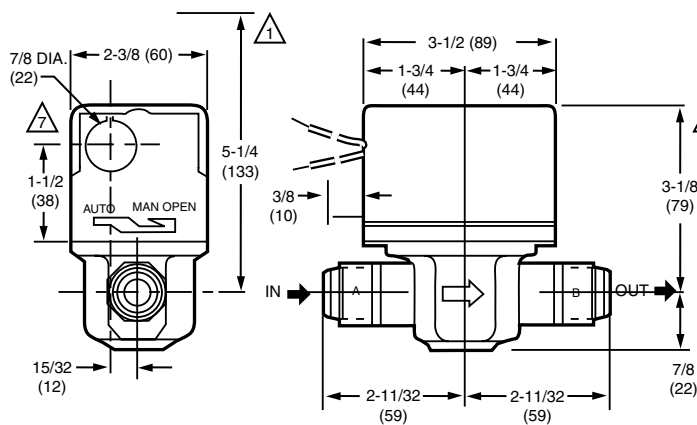
V4043, V8043 SWEAT COPPER CONNECTION MODELS <sup>8</sup>



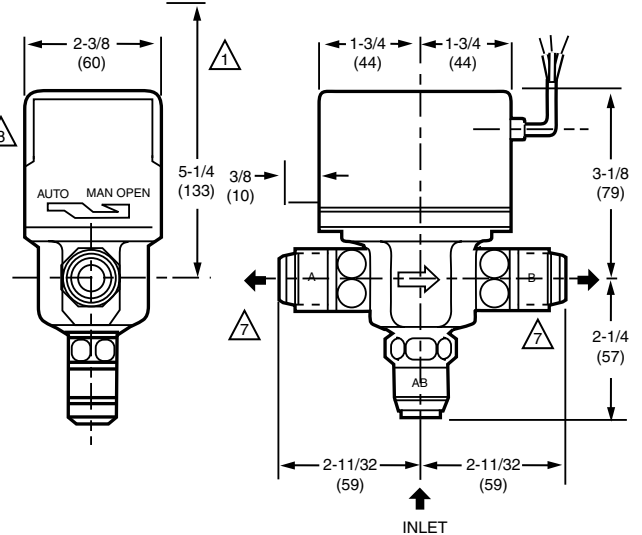
V4044, V8044 SWEAT COPPER CONNECTION MODELS



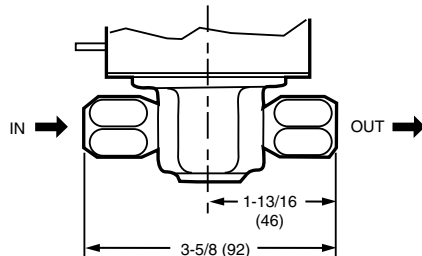
V4043, V8043 FLARE-FITTING MODELS <sup>6</sup>



V4044, V8044 FLARE-FITTING MODELS



V8043 INVERTED FLARE MODELS



- <sup>1</sup> HEIGHT NEEDED TO REMOVE COVER.
- <sup>2</sup> DIMENSIONS FOR 1/2 IN. COPPER TUBING.
- <sup>3</sup> DIMENSIONS FOR 3/4 IN COPPER TUBING.
- <sup>4</sup> DIMENSIONS FOR 1 IN. COPPER TUBING.
- <sup>5</sup> 4-7/8 IN. (124) MAX ON V8034F WITH TERMINAL BOARD ENCLOSURE.
- <sup>6</sup> V4034B AND V8043B VALVES THAT ARE NORMALLY OPEN IN THE DE-ENERGIZED POSITION HAVE NO MANUAL LEVER. THE VALVES ALSO HAVE A REVERSED POWERHEAD WHERE THE LEADWIRES EXIT THE POWERHEAD ABOVE THE B (OUTLET) PORT RATHER THAN ABOVE THE A (INLET) PORT.
- <sup>7</sup> REFER TO MOUNTING INSTRUCTIONS.
- <sup>8</sup> OPENING FOR 1/2 IN. CONDUIT ON MANUAL LEVER SIDE FOR V4043, V8043; OPENING ON OPPOSITE SIDE FOR V4044, V8044.

M10175

# Motorized Zone Valves

## V8043 Low Voltage Normally Closed Zone Valves



Flare Connection



Sweat Connection



NPT Connection



Sweat Connection with terminal block



Inverted Flare

**Two-way on-off low voltage valves consist of an actuator and valve assembly for controlling the flow of hot water.**

- Manual opener (on all models, except straight-through, normally open valves) for valve operation on power failure; valve returns to automatic position when power is restored.
- All models may be installed without disassembling the valve.
- Compact construction for easy installation.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- Actuator motor may be replaced without removing the valve body or draining the system.

**Application:** Hydronic Control

**Valve Type:** Zone Valve

**Body Pattern:** Two-way, Straight-through

**Valve Action:** Spring return to close

**Voltage:** 24 Vac; Power Consumption – 7.7 VA

**Frequency:** 50 Hz; 60 Hz

**Actuation:** Two position

**De-energized Position:** Two position

**Ambient Temperature Range:** 125°F Maximum (52°C Maximum)

**Fluid Temperature:** 50°F to 200°F (10°C to 93°C)

**Static Pressure Rating (psi):** 125 psi

**Static Pressure Rating (kPa):** 862 kPa

**Materials (Body):** Brass

**Materials (Seat):** Brass

**Materials (Stem):** Stainless Steel

**Materials (Plug / Ball / Disc):** Buna-N (NBR) Rubber Ball

**Materials (Packing):** EPDM rubber

**Timing:** Nominal Open – 15 sec

**Operating Humidity Range (% RH):** 5 to 95% relative humidity, non-condensing.

**Manual Opener:** Yes

**Approvals, Underwriters Laboratories Inc.:** UL Listed: File MH11826

**Approvals, CSA:** CSA Certified: File 1322

**Comments:** Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water. Valve designed for cycling (not constantly powered on) applications.

**Current Draw:** 0.32A

**Dimensions in inches (millimeters).** See page 219.

**Replacement Parts:**

**802360JA/U** – 24V Replacement motor for V8043/44

**802360UA/U** – 24V, 50/60 Hz Replacement motor for steam and heating Zone Valves

Material Number	Capacity (Cv)	Capacity (Kv)	Pipe Size (inch)	Pipe Size (DN)	Connection Type	Maximum Differential Pressure Ratings (Close-off) (psi)	Maximum Differential Pressure Ratings (Close-off) (kPa)	End Switch Rating	Electrical Connections	Auxiliary End Switch
V8043A1003/U	3.5 Cv	3 Kv	1/2 in.	DN15	Flare	20 psi	138 kPa		18 in. (457 mm) leads	
V8043A1011/U	3.5 Cv	3 Kv	1/2 in.	DN15	Sweat	20 psi	138 kPa		18 in. (457 mm) leads	
V8043A1029/U	3.5 Cv	3 Kv	3/4 in.	DN20	Sweat	20 psi	138 kPa		18 in. (457 mm) leads	
V8043A1037/U	3.5 Cv	3 Kv	1 in.	DN25	Sweat	20 psi	138 kPa		18 in. (457 mm) leads	
V8043A1185/U	8 Cv	6.9 Kv	3/4 in.	DN20	Sweat	8 psi	55 kPa		18 in. (457 mm) leads	
V8043A1219/U	3.5 Cv	3 Kv	1/2 in.	DN15	Sweat	20 psi	138 kPa		18 in. (457 mm) leads	
V8043A1227/U	3.5 Cv	3 Kv	1/2 in.	DN15	NPT	20 psi	138 kPa		18 in. (457 mm) leads	
V8043E1004/U	3.5 Cv	3 Kv	1/2 in.	DN15	Sweat	20 psi	138 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	18 in. (457 mm) leads	N.O. SPST
V8043E1012/U	3.5 Cv	3 Kv	3/4 in.	DN20	Sweat	20 psi	138 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	18 in. (457 mm) leads	N.O. SPST
V8043E1020/U	3.5 Cv	3 Kv	1 in.	DN25	Sweat	20 psi	138 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	18 in. (457 mm) leads	N.O. SPST
V8043E1061/U	8 Cv	6.9 Kv	3/4 in.	DN20	Sweat	8 psi	55 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	18 in. (457 mm) leads	N.O. SPST

# Motorized Zone Valves

Material Number	Capacity (Cv)	Capacity (Kv)	Pipe Size (inch)	Pipe Size (DN)	Connection Type	Maximum Differential Pressure Ratings (Close-off) (psi)	Maximum Differential Pressure Ratings (Close-off) (kPa)	End Switch Rating	Electrical Connections	Auxiliary End Switch
V8043E1079/U	8 Cv	6.9 Kv	1 in.	DN25	Sweat	8 psi	55 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	18 in. (457 mm) leads	N.O. SPST
V8043E1137/U	10 Cv	8.6 Kv	1 in.	DN25	NPT	6.5 psi	45 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	18 in. (457 mm) leads	N.O. SPST
V8043E1145/U	3.5 Cv	3 Kv	3/4 in.	DN20	NPT	20 psi	138 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	18 in. (457 mm) leads	N.O. SPST
V8043F1028/U	3.5 Cv	3 Kv	1/2 in.	DN15	Sweat	20 psi	138 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	screw terminal block	N.O. SPST
V8043F1036/U	3.5 Cv	3 Kv	3/4 in.	DN20	Sweat	20 psi	138 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	screw terminal block	N.O. SPST
V8043F1051/U	3.5 Cv	3 Kv	1 in.	DN25	Sweat	20 psi	138 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	screw terminal block	N.O. SPST
V8043F1093/U	8 Cv	6.9 Kv	3/4 in.	DN20	Sweat	8 psi	55 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	screw terminal block	N.O. SPST
V8043F1101/U	8 Cv	6.9 Kv	1 in.	DN25	Sweat	8 psi	55 kPa	50 VA pilot duty @ 24 V; 4.4 A running with 26.4 A inrush @ 120 V	screw terminal block	N.O. SPST